

AQMIS

Air Quality and Meteorological Information
System

Current Status

October 29, 2004

AQMIS

Presentation Outline

- *What is AQMIS?*
- *Current Status*
- *What's Next?*
- *Summary*

What is AQMIS?

A web-based data system containing real-time and historical air quality and met data, with many uses:

- *Provide Public Information*
- *Track Progress*
- *Serve Smoke Management Program*
- *Support Air Quality Analyses and Modeling Efforts*
- *Support Emergency Response Model*

System Overview

- Three servers
 - 1 data storage, 1 number cruncher, 1 webserver
 - polling box
- Linux platform
 - Php, Ocaml, Python
- Postgresql database
- Goal: everything open source & easy to maintain

Current Status

Who Are the Data Providers?

Data available for 280 AQ sites & 400 Met. Sites

- South Coast AQMD
- San Diego APCD
- Ventura County APCD
- Bay Area AQMD
- Sacramento Metro AQMD
- San Joaquin Valley APCD
- Mesonet
- Buoys and Coastal Reports
- Air Resources Board
- Mojave Desert AQMD
- Santa Barbara County AQMD
- Monterey Bay Unified APCD
- National Park Service
- San Louis Obispo APCD

Current Status (*cont.*)

What Types of Data Are Available?

Air Quality Parameters

- *Ozone*
- *PM10 & PM2.5*
- *NO, NO2, & NO_x*
- *CO*
- *CH4, NMHC & THC*
- *SO2 & H2S*

Ground Level Met.

- *Wind Speed & Direction*
- *Temperature*
- *Relative Humidity*
- *Dewpoint*
- *Precipitation*
- *Pressure*
- *Solar Radiation*

Current Status (*cont.*)

Value Added QA

Quality Assurance

- *Reject Incoming Flagged Data*
- *Series of statistical routines to apply QA to incoming data, currently tested and applied to ozone*
- *Routines trained on 3 years of QA'd historical data and are site specific*

Plans for further refinements and extension to other pollutants and met parameters

Current Status (*cont.*)

Ozone Alert Notification

- *Watch for Critical Ozone Values*
- *Confirm Values with Data Providers*
- *Notify Interested Parties*
- *Purpose: Federal and state implementation plans* ⁸

What's Next

- Work in Progress
 - Dynamic Graphing
 - Enhanced QA Routines
 - More Data Streams
 - Open Source Software
- Integration with other systems
 - historical data, fire reporting sys, community health
- Trajectory Model
- Continuous enhancements as they arise

Summary

AQMIS Provides:

- *Data Now*
- *Ease of use*
- *Many Levels of Detail*
- *Tables and Graphs*
- *Future Enhancements Underway (Maps)*

For More Information

AQMIS Web Address:

<http://www.arb.ca.gov/airqualitytoday>

Questions about AQMIS:

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